

Report No.: 01

Test Time: 2015/12/1 14:24

## Luminaire Property

Luminaire Manufacturer: Acolyte

Luminaire Category: RB245.5RGBW-All bright

Luminaire Description: RB245.5RGBW-All bright

Number of Lamps: 1

Luminous Width (mm): 12

Voltage: 24.0 V

Power: 10.96 W

Luminous Length (mm): 500

Luminous Height (mm): 5

Current: 0.457 A

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 457.4 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H120.3

Vertical Diffuse Angle(50%): V119.9

Luminaire Efficacy Rating (LER): 42

Max. Intensity: 145.37 cd

Total Rated Lamp Lumens: 457.4 lm

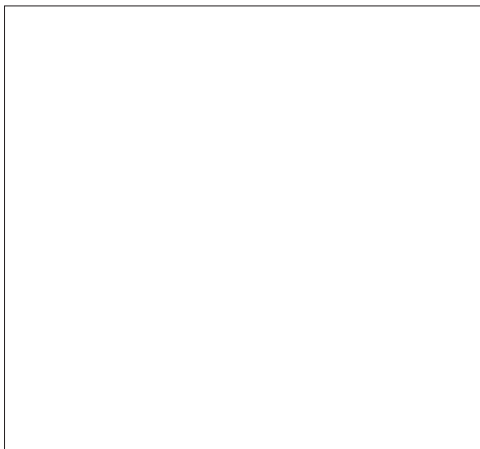
Efficiency: 100%

Upward Ratio: 1%

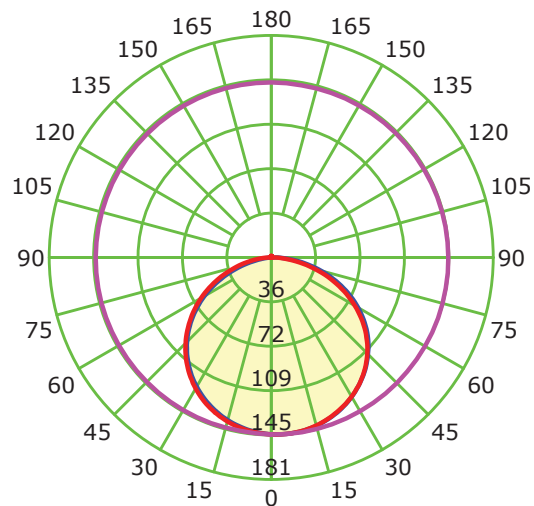
Central Intensity: 144.64 cd

Pos of Max. Intensity: H40 V5

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270 — G5

C Plane (°):0.0-360.0: 10.0

Test Lab: ACOLYTE

Test Type: TYPE C

Temperature: 24°C

Operator:

Gamma Plane (°):0.0-180.0:1.0

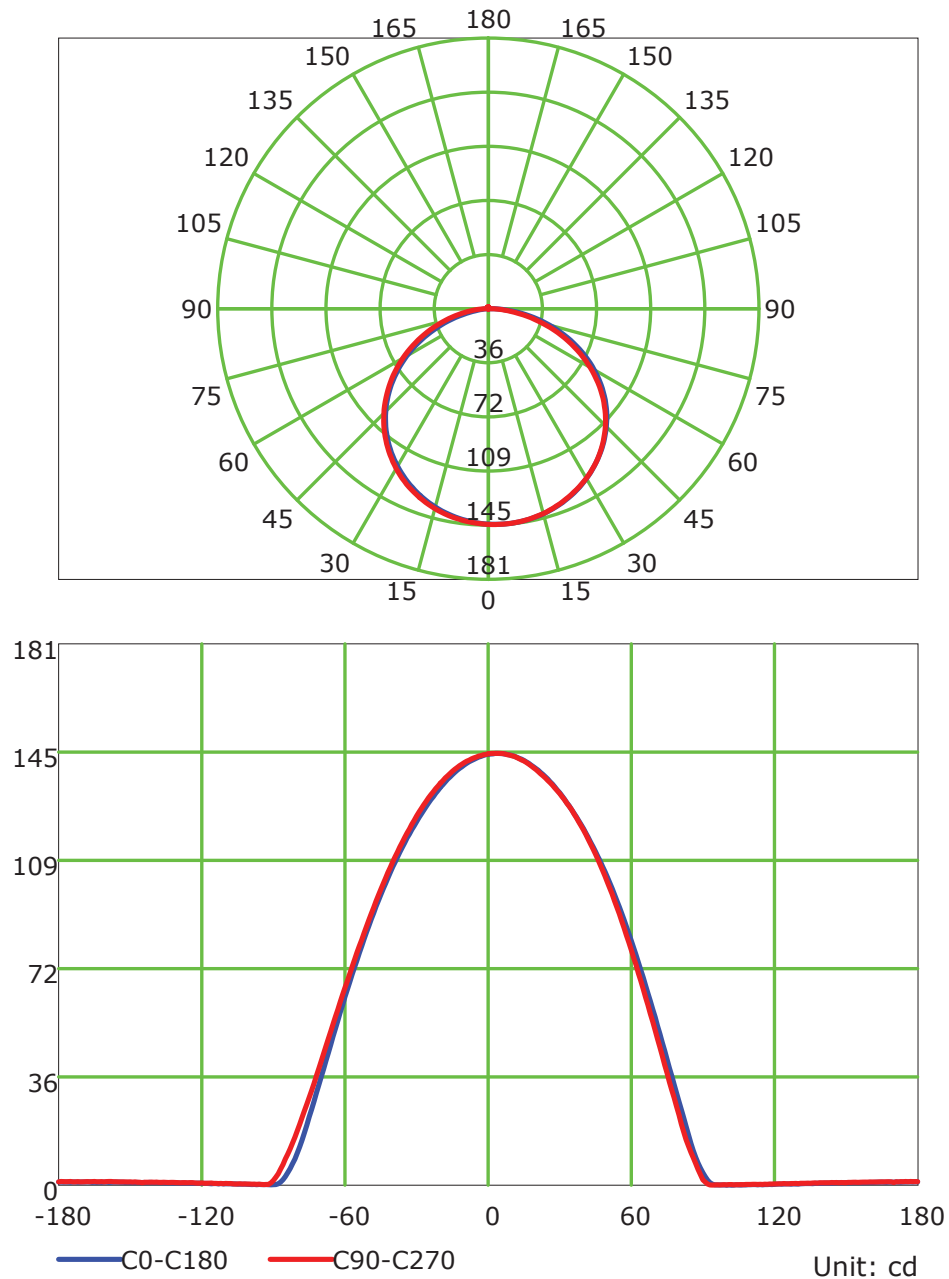
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Luminous Intensity Distribution Curve



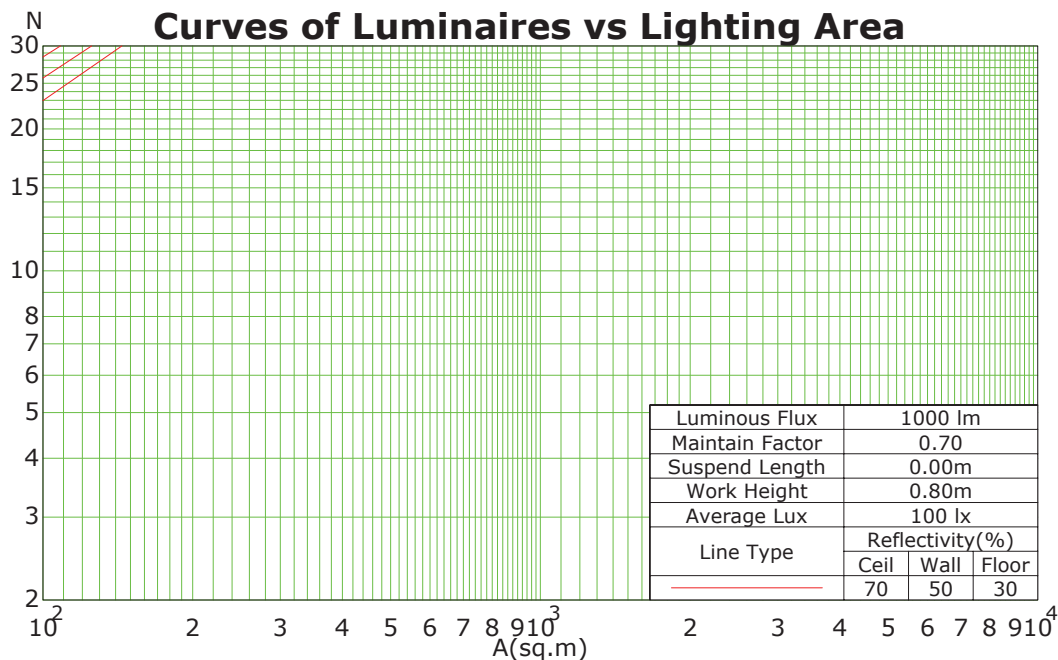
C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

### Coefficients Of Utilization - Zonal Cavity Method

RC	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1	0.1	0
RW	0.7	0.5	0.3	0.1	0.7	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0.5	0.3	0.1	0
RCR	RF = 0.2																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	108	103	99	94	105	101	97	93	96	93	90	92	89	87	88	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	75	71	77	73	70	67
3	89	78	70	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	54	50	48
5	75	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	34	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

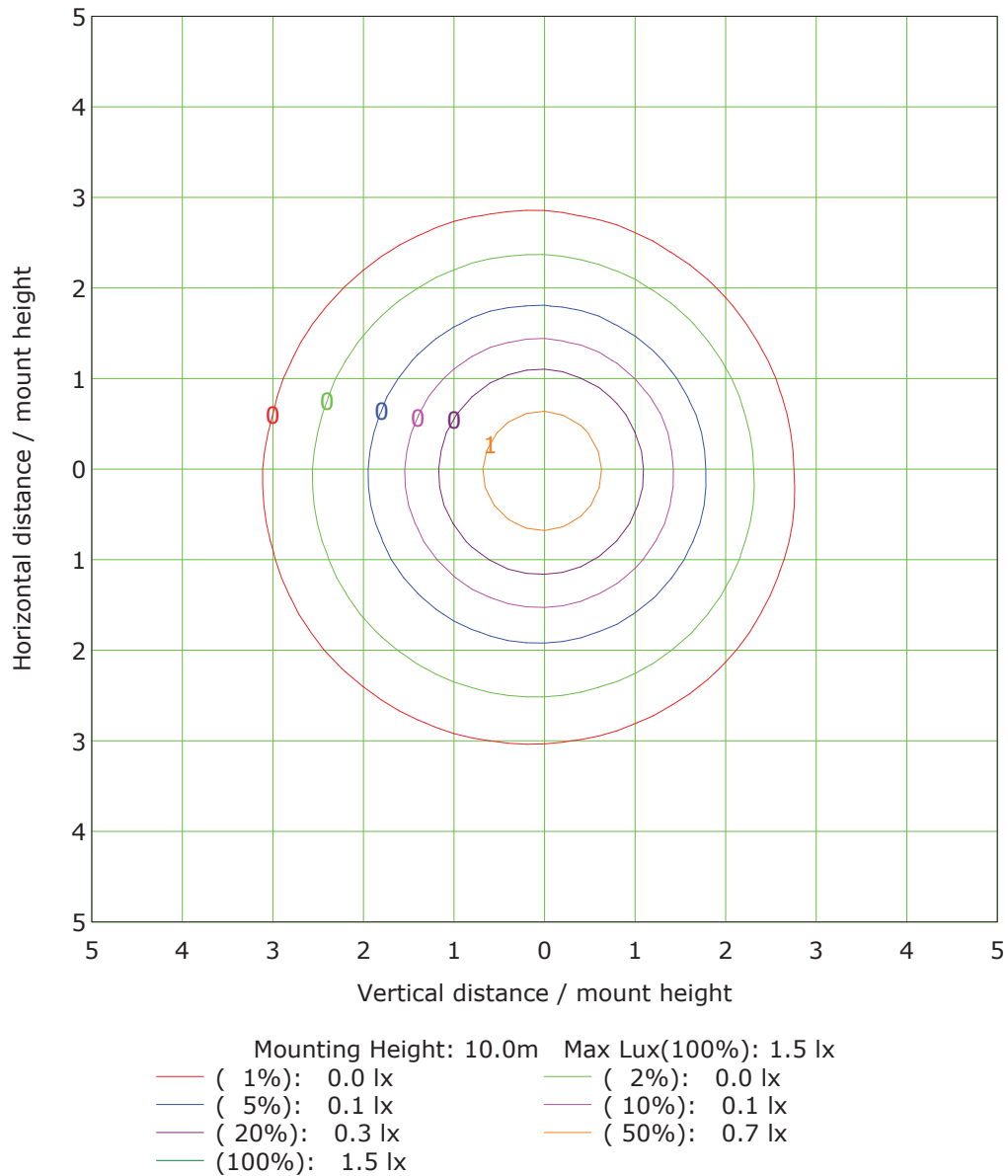
Spacing Criteria (0-180): 1.30  
Spacing Criteria (90-270): 1.31  
Spacing Criteria (Diagonal): 1.44



C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## IsoLux Plot

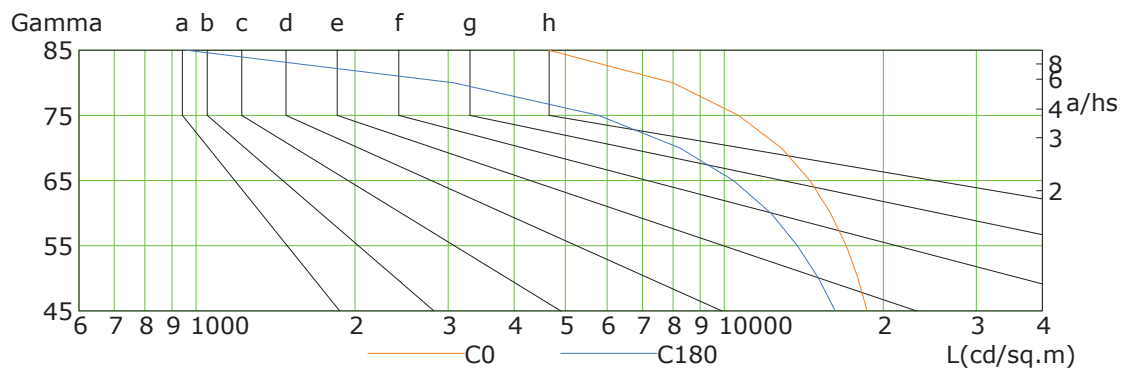
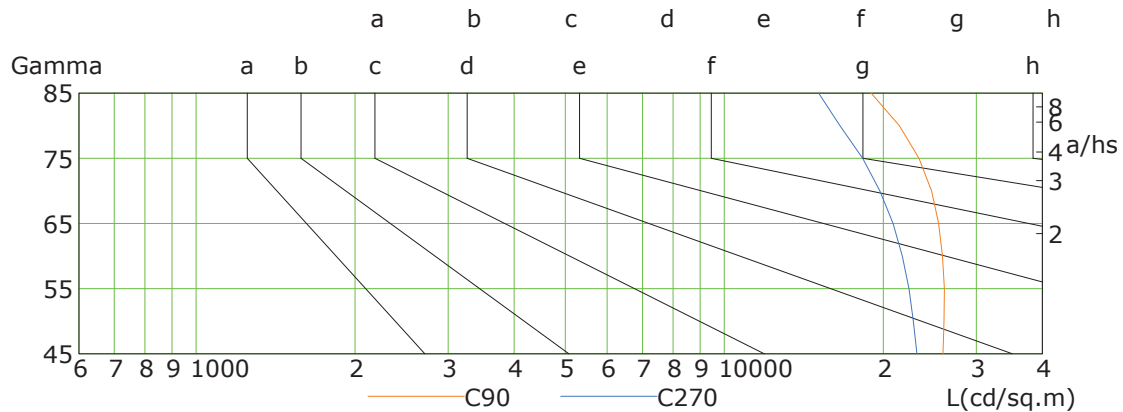


C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
1.15	A	2000	1000	500	<=300				
1.50	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.20	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300

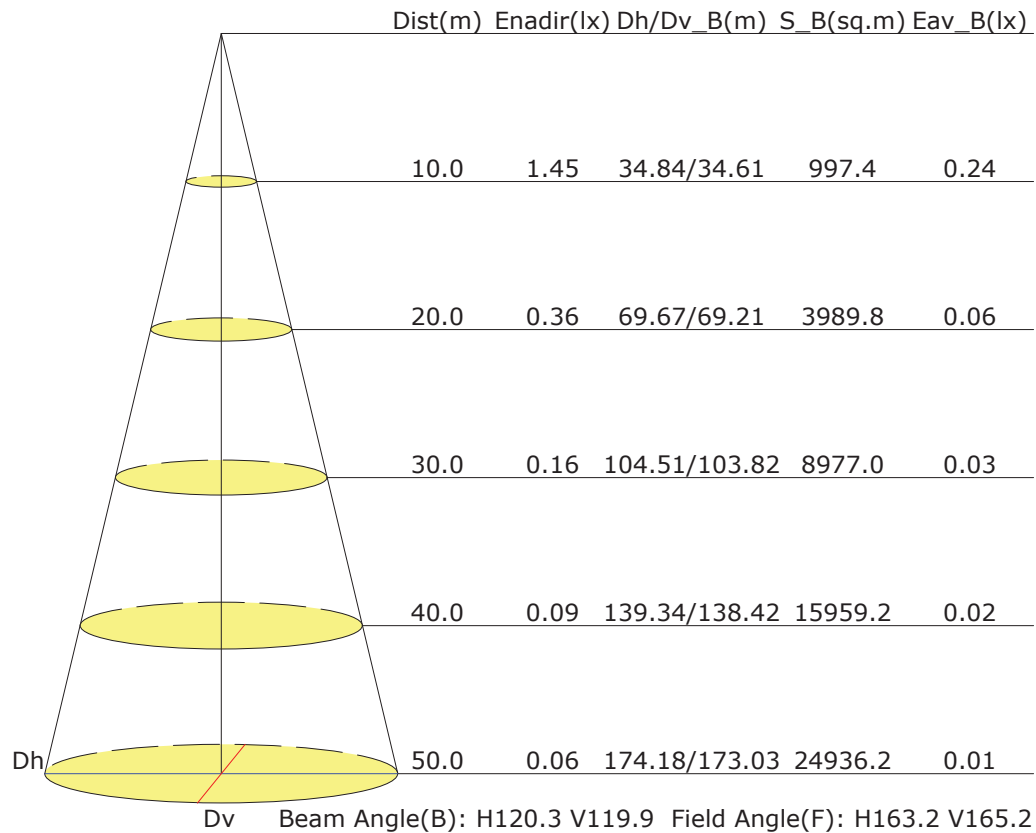


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	18628	17911	17011	15882	14525	12819	10633	7988	4653
C90	25941	26059	26093	25885	25451	24676	23366	21454	18963
C180	16220	15078	13747	12252	10407	8241	5779	3074	959
C270	23157	22800	22363	21724	20872	19701	18282	16558	15085

C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

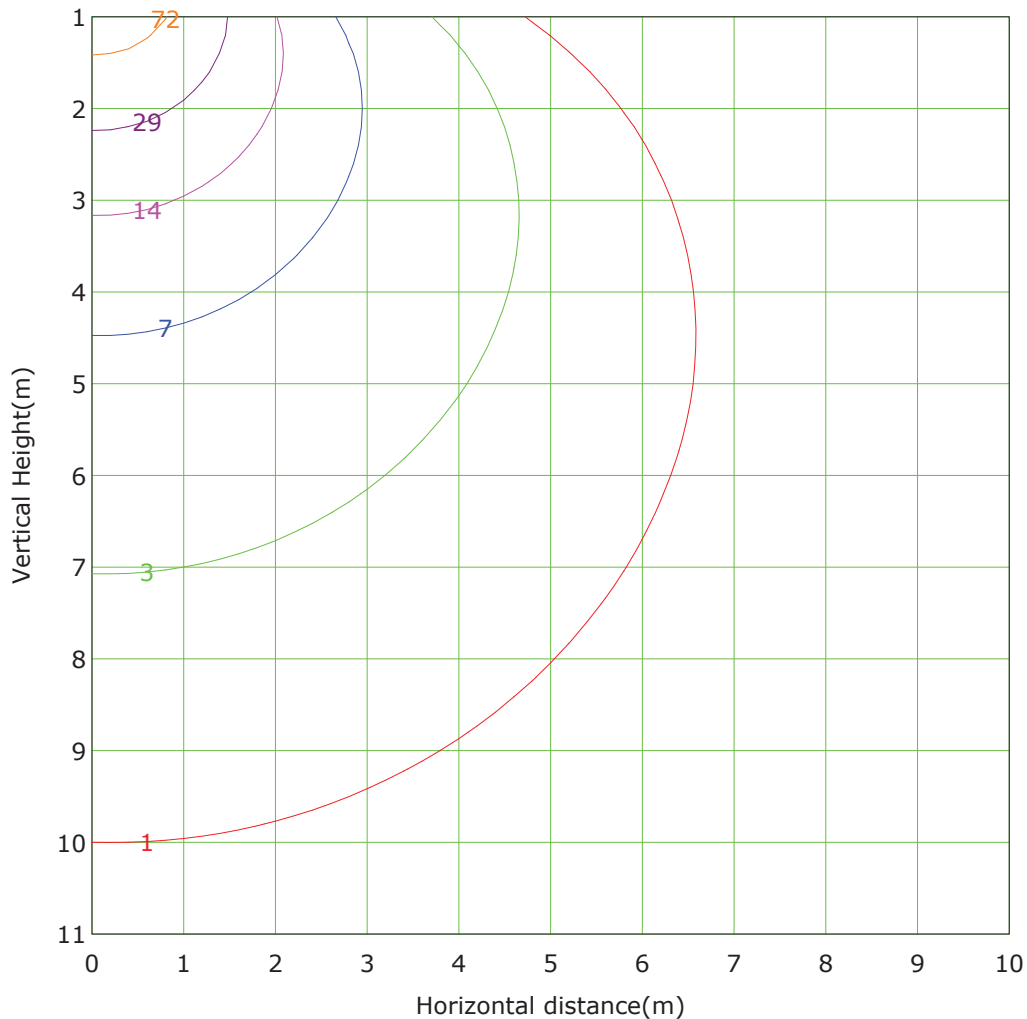
## Illuminance at a Distance



C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 144.6 lx  
 ( 1%): 1.4 lx ( 2%): 2.9 lx  
 ( 5%): 7.2 lx ( 10%): 14.5 lx  
 ( 20%): 28.9 lx ( 50%): 72.3 lx  
 (100%): 144.6 lx

C Plane (°):0.0-360.0: 10.0  
 Test Lab: ACOLYTE  
 Test Type: TYPE C  
 Temperature: 24°C  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:

## Area Flux Table

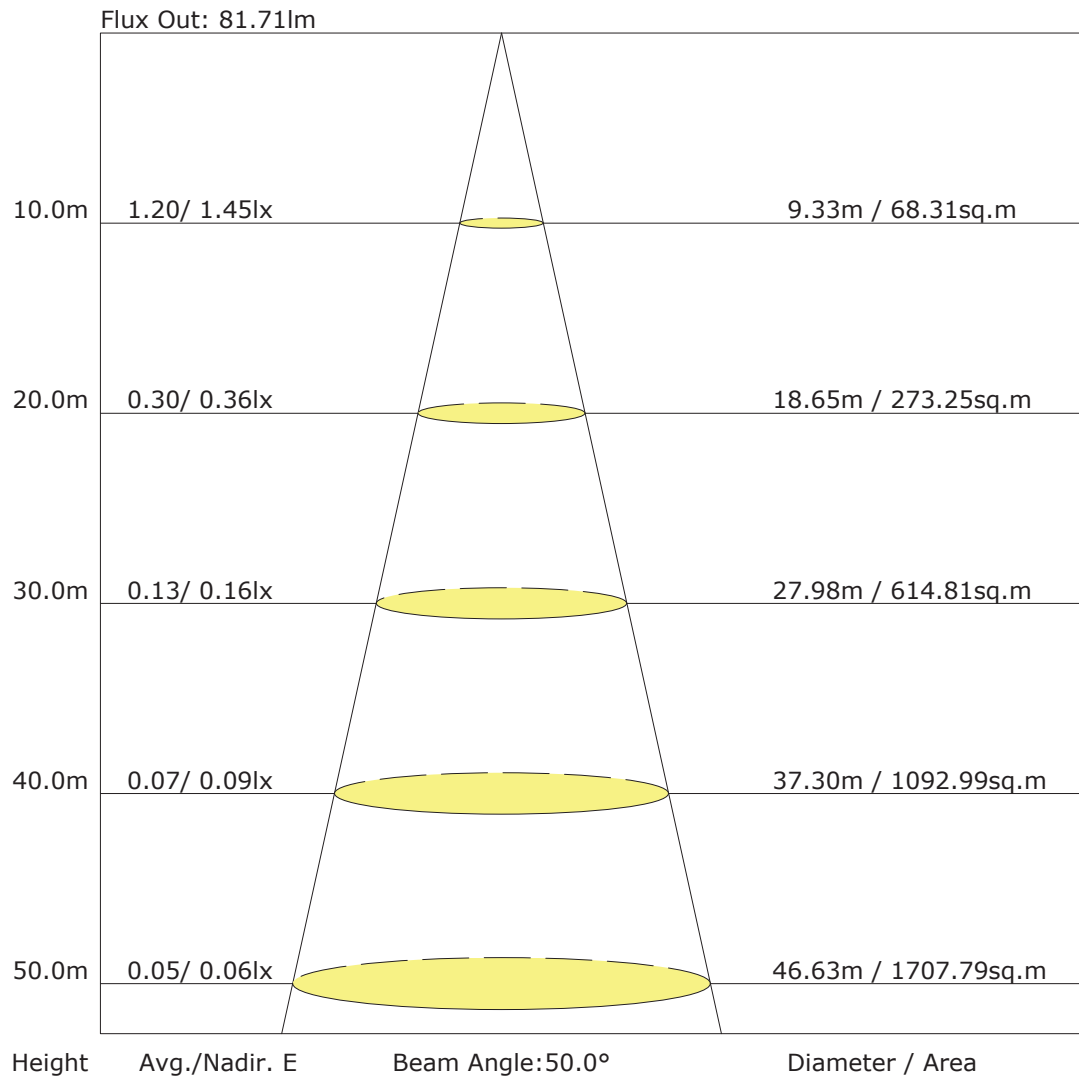
Unit: lm												
Horizontal plane												
Vertical plane												
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3
-80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.8
-70	0.0	0.0	0.2	0.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.4
-60	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.1	2.3	2.4	2.3	2.1
-50	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.7	3.0	3.0	2.9	2.6
-40	0.0	0.1	0.5	1.0	1.6	2.2	2.8	3.2	3.5	3.5	3.4	3.0
-30	0.0	0.2	0.6	1.2	1.8	2.5	3.2	3.6	3.9	3.9	3.8	3.4
-20	0.0	0.2	0.6	1.3	2.0	2.7	3.4	3.9	4.2	4.2	4.0	3.6
-10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
0	0.0	0.2	0.7	1.3	2.1	2.9	3.5	4.0	4.3	4.4	4.2	3.8
10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
20	0.0	0.2	0.6	1.2	2.0	2.7	3.3	3.8	4.1	4.1	3.9	3.5
30	0.0	0.1	0.5	1.1	1.8	2.5	3.1	3.5	3.8	3.8	3.6	3.3
40	0.0	0.1	0.4	0.9	1.5	2.1	2.7	3.1	3.3	3.4	3.2	2.9
50	0.0	0.1	0.3	0.7	1.2	1.7	2.2	2.5	2.7	2.8	2.6	2.4
60	0.0	0.0	0.2	0.5	0.8	1.2	1.5	1.8	2.0	2.0	1.9	1.7
70	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.1	1.0
80	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.3
90	0.1	1.9	6.6	14.0	22.8	31.8	39.9	46.1	49.7	50.6	48.4	43.6
Flux(T)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
Flux(E)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
-80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.7
-70	0.0	0.0	0.2	0.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.4
-60	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.1	2.3	2.4	2.3	2.1
-50	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.7	3.0	3.0	2.9	2.6
-40	0.0	0.1	0.5	1.0	1.6	2.2	2.8	3.2	3.5	3.5	3.4	3.0
-30	0.0	0.2	0.6	1.2	1.8	2.5	3.2	3.6	3.9	3.9	3.8	3.4
-20	0.0	0.2	0.6	1.3	2.0	2.7	3.4	3.9	4.2	4.2	4.0	3.6
-10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
0	0.0	0.2	0.7	1.3	2.1	2.9	3.5	4.0	4.3	4.4	4.2	3.8
10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
20	0.0	0.2	0.6	1.2	2.0	2.7	3.3	3.8	4.1	4.1	3.9	3.5
30	0.0	0.1	0.5	1.1	1.8	2.5	3.1	3.5	3.8	3.8	3.6	3.3
40	0.0	0.1	0.4	0.9	1.5	2.1	2.7	3.1	3.3	3.4	3.2	2.9
50	0.0	0.1	0.3	0.7	1.2	1.7	2.2	2.5	2.7	2.8	2.6	2.4
60	0.0	0.0	0.2	0.5	0.8	1.2	1.5	1.8	2.0	2.0	1.9	1.7
70	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.1	1.0
80	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.3
90	0.1	1.9	6.6	14.0	22.8	31.8	39.9	46.1	49.7	50.6	48.4	43.6
Flux(T)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
Flux(E)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
-80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.7
-70	0.0	0.0	0.2	0.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.4
-60	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.1	2.3	2.4	2.3	2.1
-50	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.7	3.0	3.0	2.9	2.6
-40	0.0	0.1	0.5	1.0	1.6	2.2	2.8	3.2	3.5	3.5	3.4	3.0
-30	0.0	0.2	0.6	1.2	1.8	2.5	3.2	3.6	3.9	3.9	3.8	3.4
-20	0.0	0.2	0.6	1.3	2.0	2.7	3.4	3.9	4.2	4.2	4.0	3.6
-10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
0	0.0	0.2	0.7	1.3	2.1	2.9	3.5	4.0	4.3	4.4	4.2	3.8
10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
20	0.0	0.2	0.6	1.2	2.0	2.7	3.3	3.8	4.1	4.1	3.9	3.5
30	0.0	0.1	0.5	1.1	1.8	2.5	3.1	3.5	3.8	3.8	3.6	3.3
40	0.0	0.1	0.4	0.9	1.5	2.1	2.7	3.1	3.3	3.4	3.2	2.9
50	0.0	0.1	0.3	0.7	1.2	1.7	2.2	2.5	2.7	2.8	2.6	2.4
60	0.0	0.0	0.2	0.5	0.8	1.2	1.5	1.8	2.0	2.0	1.9	1.7
70	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.1	1.0
80	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.3
90	0.1	1.9	6.6	14.0	22.8	31.8	39.9	46.1	49.7	50.6	48.4	43.6
Flux(T)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
Flux(E)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
-80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.7
-70	0.0	0.0	0.2	0.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.4
-60	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.1	2.3	2.4	2.3	2.1
-50	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.7	3.0	3.0	2.9	2.6
-40	0.0	0.1	0.5	1.0	1.6	2.2	2.8	3.2	3.5	3.5	3.4	3.0
-30	0.0	0.2	0.6	1.2	1.8	2.5	3.2	3.6	3.9	3.9	3.8	3.4
-20	0.0	0.2	0.6	1.3	2.0	2.7	3.4	3.9	4.2	4.2	4.0	3.6
-10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
0	0.0	0.2	0.7	1.3	2.1	2.9	3.5	4.0	4.3	4.4	4.2	3.8
10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
20	0.0	0.2	0.6	1.2	2.0	2.7	3.3	3.8	4.1	4.1	3.9	3.5
30	0.0	0.1	0.5	1.1	1.8	2.5	3.1	3.5	3.8	3.8	3.6	3.3
40	0.0	0.1	0.4	0.9	1.5	2.1	2.7	3.1	3.3	3.4	3.2	2.9
50	0.0	0.1	0.3	0.7	1.2	1.7	2.2	2.5	2.7	2.8	2.6	2.4
60	0.0	0.0	0.2	0.5	0.8	1.2	1.5	1.8	2.0	2.0	1.9	1.7
70	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.1	1.0
80	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.3
90	0.1	1.9	6.6	14.0	22.8	31.8	39.9	46.1	49.7	50.6	48.4	43.6
Flux(T)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
Flux(E)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
-80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.7
-70	0.0	0.0	0.2	0.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.4
-60	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.1	2.3	2.4	2.3	2.1
-50	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.7	3.0	3.0	2.9	2.6
-40	0.0	0.1	0.5	1.0	1.6	2.2	2.8	3.2	3.5	3.5	3.4	3.0
-30	0.0	0.2	0.6	1.2	1.8	2.5	3.2	3.6	3.9	3.9	3.8	3.4
-20	0.0	0.2	0.6	1.3	2.0	2.7	3.4	3.9	4.2	4.2	4.0	3.6
-10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
0	0.0	0.2	0.7	1.3	2.1	2.9	3.5	4.0	4.3	4.4	4.2	3.8
10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7
20	0.0	0.2	0.6	1.2	2.0	2.7	3.3	3.8	4.1	4.1	3.9	3.5
30	0.0	0.1	0.5	1.1	1.8	2.5	3.1	3.5	3.8	3.8	3.6	3.3
40	0.0	0.1	0.4	0.9	1.5	2.1	2.7	3.1	3.3	3.4	3.2	2.9
50	0.0	0.1	0.3	0.7	1.2	1.7	2.2	2.5	2.7	2.8	2.6	2.4
60	0.0	0.0	0.2	0.5	0.8	1.2	1.5	1.8	2.0	2.0	1.9	1.7
70	0.0	0.0	0.1	0.2	0.4	0.6	0.8	1.0	1.1	1.2	1.1	1.0
80	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.3
90	0.1	1.9	6.6	14.0	22.8	31.8	39.9	46.1	49.7	50.6	48.4	43.6
Flux(T)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
Flux(E)	0.0	1.4	6.3	13.6	22.4	31.4	39.5	45.7	49.4	50.2	48.1	43.2
-90	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2
-80	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.8	0.9	0.9	0.9	0.7
-70	0.0	0.0	0.2	0.4	0.6	0.9	1.2	1.4	1.6	1.6	1.6	1.4
-60	0.0	0.1	0.3	0.6	1.0	1.4	1.8	2.1	2.3	2.4	2.3	2.1
-50	0.0	0.1	0.4	0.8	1.3	1.9	2.4	2.7	3.0	3.0	2.9	2.6
-40	0.0	0.1	0.5	1.0	1.6	2.2	2.8	3.2	3.5	3.5	3.4	3.0
-30	0.0	0.2	0.6	1.2	1.8	2.5	3.2	3.6	3.9	3.9	3.8	3.4
-20	0.0	0.2	0.6	1.3	2.0	2.7	3.4	3.9	4.2	4.2	4.0	3.6
-10	0.0	0.2	0.6	1.3	2.1	2.8	3.5	4.0	4.3	4.3	4.1	3.7

C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:



## The Average Illuminance Effective Figure



C Plane (°): 0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°): 0.0-180.0: 1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector:

## UGR Table

Reflectance:										
Ceiling (cavity)	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
X=2H Y=2H	26.1	27.7	26.4	28.0	28.4	24.9	26.6	25.3	26.9	27.2
3H	28.2	29.7	28.5	30.0	30.4	26.6	28.1	27.0	28.4	28.8
4H	29.0	30.4	29.4	30.8	31.2	27.1	28.5	27.5	28.9	29.3
6H	29.7	31.0	30.1	31.4	31.8	27.5	28.8	27.9	29.2	29.6
8H	30.0	31.2	30.4	31.6	32.0	27.6	28.8	28.0	29.2	29.7
12H	30.2	31.4	30.6	31.8	32.2	27.6	28.8	28.1	29.2	29.7
X=4H Y=2H	26.5	28.0	27.0	28.3	28.7	25.6	27.0	26.0	27.4	27.8
3H	28.8	30.0	29.3	30.4	30.9	27.5	28.6	27.9	29.1	29.5
4H	29.8	30.9	30.2	31.3	31.8	28.1	29.2	28.6	29.6	30.1
6H	30.6	31.6	31.1	32.0	32.5	28.6	29.6	29.1	30.0	30.5
8H	30.9	31.8	31.4	32.3	32.8	28.7	29.6	29.2	30.1	30.6
12H	31.2	32.0	31.7	32.5	33.0	28.8	29.6	29.3	30.1	30.6
X=8H Y=4H	30.0	30.9	30.5	31.3	31.8	28.5	29.4	28.9	29.8	30.3
6H	30.9	31.7	31.4	32.2	32.7	29.0	29.8	29.5	30.3	30.8
8H	31.3	32.0	31.8	32.5	33.0	29.2	29.9	29.7	30.4	30.9
12H	31.6	32.2	32.1	32.7	33.3	29.3	29.9	29.9	30.4	31.0
X=12H Y=4H	30.0	30.8	30.5	31.3	31.8	28.5	29.3	29.0	29.8	30.3
6H	31.0	31.6	31.5	32.1	32.6	29.1	29.8	29.6	30.3	30.8
8H	31.4	31.9	31.9	32.5	33.0	29.3	29.9	29.8	30.4	31.0

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 10.0  
Test Lab: ACOLYTE  
Test Type: TYPE C  
Temperature: 24°C  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 9.028 m  
Humidity: 60%  
Inspector: